

U.S. Application Serial No. 10/655,985  
Attorney Docket: 46107-0091  
Reply to Final Office Action Dated January 17, 2006

### REMARKS

This Amendment and Response is in response to the Final Office Action dated January 17, 2006 wherein the Examiner:

- (i) rejected claims 16, 18 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Daniels et al. (U.S. Publication No. 2004/0083794) ("Daniels") in view of Deutsch et al. (U.S. Patent No. 5,054,461) ("Deutsch"),
- (ii) indicated that claims 2-9, 11-14 and 20 are allowed, and
- (iii) objected to claims 17 and 20 as being dependent on a rejected base claim, but indicated that these claims would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

Applicants have thoroughly reviewed the outstanding Final Office Action including the Examiner's remarks and the references cited therein. The following remarks are believed to be fully responsive to the Final Office Action and, when coupled with the amendments made herein, are believed to render all claims at issue patentably distinguishable over the cited references.

All the changes are made for clarification and are based on the application and drawings as originally filed. It is respectfully submitted that no new matter is added. Applicants respectfully request reconsideration and allowance of claims 2-9, 11-14 and 16-20 in light of the above amendments and the following remarks.

#### Rejection under 35 U.S.C. § 103

The Examiner has rejected claims 16, 18 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Daniels in view of Deutsch. Applicants respectfully traverse such rejections for the reasons set forth below.

U.S. Application Serial No. 10/655,985  
Attorney Docket: 46107-0091  
Reply to Final Office Action Dated January 17, 2006

Applicants respectfully disagree with the Examiner's contention at page 3 of the Office Action that the Deutsch reference discloses a "reset input of said integrator [being] operably connected to an ignition charge pulse" as provided for by the claims at issue. The Examiner points to column 4, lines 10-13 of Deutsch to support his contention. Applicants submit, however, that there is no discussion, disclosure or suggestion in this (or any) section of the Deutsch reference of a "reset input" as provided for by claims 16, 18 and 19.

The Examiner points to element 42 of Deutsch as comprising the "integrator" of the claims. Element 42 of Deutsch is described as a "summing and integration network" and its detail is illustrated in Fig. 2. This figure illustrates that there are three (and only three) inputs to this element - specifically leads 44, 46 and 48 - and that these inputs are connected to coil windings 16, 14 and 12 respectively. However, there is no "reset input" of element 42 in this figure, nor is there any mention of a "reset" or "reset input" in the Deutsch reference whatsoever. Applicants note, in fact, that neither "reset" or "reset input" are present in Deutsch. For these reasons, Applicants submit that Deutsch does not disclose a "reset input" for element 42, let alone a "reset input of said integrator [being] operably connected to an ignition charge pulse" as provided for by the claims at issue.

With respect to the Examiner's contention in the "Response to Arguments" section at pp. 4-5 of the Final Office Action, Applicants respectfully submit that the Examiner's reliance on the signal inputs (44, 46 and 48) of the Deutsch reference as providing the "reset input" provided for by the claims is misplaced. The Examiner contends that, in the Deutsch reference, the output of the comparator can be reset by any one of the signal inputs. Applicants have clarified that the "reset input" of the "integrator" is "capable of resetting said integrator" in the above amendment to claim 18. Applicants respectfully submit that Deutsch fails to disclose a "reset input" of an "integrator" that is "capable of resetting said integrator" as provided for by clarified claim 18.

U.S. Application Serial No. 10/655,985  
Attorney Docket: 46107-0091  
Reply to Final Office Action Dated January 17, 2006

Applicants maintain their position that Deutsch fails to disclose any "reset input" and that the Examiner's position that the signal inputs can constitute a "reset input" is incorrect. However, even if one assumes that the Examiner's contention is correct that the comparator output may be reset, it is clear that any reset input that exists would be to the comparator, i.e., either input signal line 61 or the input signal from element 64 of Deutsch, and not to element 42 as contended by the Examiner. Therefore, Applicants respectfully submit that the Deutsch reference fails to disclose "an integrator having ... a reset input" that is "capable of resetting said integrator" as provided for by claims 16, 18 and 19.

Applicants have limited the discussion above to elements of claim 18 because the remaining rejected claims 16 and 19 depend therefrom. Therefore, because claim 18 is allowable, claims 16 and 19 should also be allowable.

#### **Allowable Subject Matter**

Applicants note with appreciation the Examiner's indication that claims 2-9, 11-14 are allowed and that claims 17 and 20 would be allowable if rewritten to be in independent form including all of the limitations of the base claim and any intervening claims. Since Applicants submit that the claim on which claims 17 and 20 depend is patentable over the prior art, as discussed above, Applicants have not rewritten claims 17 and 20 in independent form at this time.

#### **Entry of Amendment After Final**

It is respectfully submitted that the present amendment should be entered in accordance with the provisions of 37 C.F.R. Section 1.116 on the grounds that: (1) The claims as now presented are in better form for appeal purposes, if necessary; (2) no new issues have been raised; (3) and, moreover, the present amendment is believed to place the application in condition for allowance. Specifically with respect to the point that no new issues have been raised, Applicants wish to point out that the added language to claim 18 has already been presented to the Examiner for his

U.S. Application Serial No. 10/655,985  
Attorney Docket: 46107-0091  
Reply to Final Office Action Dated January 17, 2006

consideration, for example, in claim 3 of the present Application (both amended claim 18 and previously allowed claim 3 state "resetting said integrator") and, therefore, this amendment cannot be said to raise a new issue that would preclude its entry.

**Conclusion**

In light of the above remarks, it is respectfully submitted that Applicants have responded in a fully satisfactory manner to all matters at issue in this Application, and that this Application is now in condition for allowance. In this regard, Applicants have made every effort to comply with the requirements set forth in the Final Office Action as well as the statutory requirements. Accordingly, Applicants respectfully request that the Examiner allow the pending claims and pass the Application to issue. If the Examiner believes that personal communication will expedite prosecution of this application, he is invited to telephone the undersigned at (248) 433-7570.

Applicants believe there are no fees due for this document, however, if any fees are due, the Patent Office is authorized to charge or refund any fee deficiency or excess to Deposit Account No. 04-1061 in the name of Dickinson Wright PLLC.

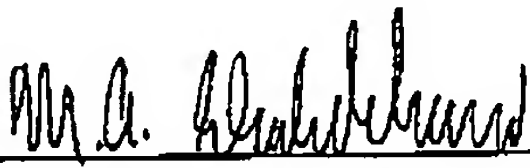
U.S. Application Serial No. 10/655,985  
Attorney Docket: 46107-0091  
Reply to Final Office Action Dated January 17, 2006

Prompt and favorable consideration of this response is respectfully requested.

Respectfully submitted,

Dickinson Wright PLLC  
Attorneys for Applicant(s)

Date: February 13, 2006

By:   
Michael A. Schaldenbrand  
Reg. No. 47,923

Dickinson Wright PLLC  
1901 L Street NW, Suite 800  
Washington, D.C. 20036  
(248) 433-7570

MAS/

BLOOMFIELD 46107-91 740301v1